

UNITED STATES OF AMERICA  
 NATIONAL TRANSPORTATION SAFETY BOARD  
 OFFICE OF ADMINISTRATIVE LAW JUDGES

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Investigation of: \*

COSCO BUSAN/BRIDGE ALLISION \*

SAN FRANCISCO, CALIFORNIA \* Docket No.: DCA-08-MM-004

\* \* \* \* \*

Interview of: CAPTAIN NAGARAJAN AGA

Office of Marine Safety  
 National Transportation Safety Board  
 Washington, D.C.

Sunday,  
 November 18, 1007

The above-captioned matter convened, pursuant to Notice,  
 at 3:30 p.m.

BEFORE: ROB JONES  
 National Transportation Safety Board

## APPEARANCES:

ROB JONES  
National Transportation Safety Board

LIAM LARUE  
National Transportation Safety Board

ERIC SAGER  
National Transportation Safety Board

JOHN COX  
Attorney for Captain Aga

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I N T E R V I E W

(3:30 p.m.)

MR. JONES: This is Rob Jones. It's November 18th,  
approximately 3:30.

We're here today for the investigation with regards to  
the Cosco Busan incident, and we are interviewing Captain Aga from  
Fleet Management, and this is an interview with regards to the  
company particulars and the goings on, how it works.

With me is Liam Larue, a marine investigator with the  
Office of Marine Safety, NTSB, and Dr. Eric Sager, with the NTSB,  
and Captain Aga, and you're represented by?

CAPTAIN AGA: John Cox of KYL.

MR. JONES: All right. Thanks, Captain.

CAPTAIN AGA: For the record, I would like to state my  
full name.

MR. JONES: Thank you.

CAPTAIN AGA: It's Nagarajan (indiscernible) but I'm  
called Aga in short. So people call me Captain Aga, and I work  
for Fleet Management.

MR. JONES: Okay. And we'll have that spelling for the  
transcriber --

CAPTAIN AGA: We'll do that.

MR. JONES: -- instead of making you spell your name out  
fully.

INTERVIEW OF CAPTAIN NAGARAJAN AGA

1 BY MR. JONES:

2 Q. Captain Aga, can you just give us a little background  
3 with your relationship to the company, how long you've worked  
4 there, what your duties are, and then we'll go into a little more  
5 depth to the actual workings of the company.

6 A. I joined Fleet Management on -- in June 1997. I've been  
7 there ever since. From '97 to 2002, I headed the manning  
8 department. I was in charge of all manning recruitment for the  
9 company. From 2002 to 2004, I headed up an operations cell which  
10 specifically focused on bulk carriers and operational problems and  
11 cargo claims. From 2004 until today, I am heading a technical  
12 division which operates ships. Currently, I'm responsible for the  
13 safe operation of 21 ships correctly. Apart from that, I am part  
14 of the company crisis management team, and in that role, I  
15 participate in any accident or any incident that takes place in  
16 the company. That's my role right now.

17 Q. Okay.

18 UNIDENTIFIED SPEAKER: You're responsible?

19 THE WITNESS: I will rephrase that. I will be part of  
20 the crisis management team.

21 BY MR. JONES:

22 Q. And how many ships did you say you were responsible for  
23 or oversaw?

24 A. I oversee 21 ships. The company runs 190 ships as of  
25 today.

1 Q. And what type of ships are those? All kinds of cargo or  
2 just a breakdown of, a generality if you would.

3 A. The company runs all types of ships, excuse me. Can I  
4 power this up so -- I've got the distribution of ships.

5 Q. Well, it's, it's just general. Yeah.

6 MR. JONES: We'll take a break from the recording.

7 (Off the record.)

8 (On the record.)

9 MR. JONES: We're back on the record.

10 THE WITNESS: Yes, talking about the type of ships that  
11 Fleet Management runs, we've got 60 bulk carriers, about 33  
12 percent of the fleet, 1 multipurpose -- 2 multipurpose vessels  
13 which is about 1 percent. We've got 36 container ships which is  
14 20 percent. We've got 21 oil tankers, about 12 percent. We've  
15 got 28 chemical tankers which is 15 percent and we have 2  
16 railroads and 28 reefers. This is the breakdown as I have put  
17 down in the presentation which I will be handing over to the NTSB.

18 BY MR. JONES:

19 Q. Okay. And just for the record, the owner of the Cosco  
20 Busan is?

21 A. The owner of the Cosco Busan is Regalstone Limited, Hong  
22 Kong.

23 Q. Okay. And the operator?

24 A. The operator as listed in the coffer (ph.) is Regalstone  
25 Limited Hong Kong.

1 UNIDENTIFIED SPEAKER: That's spelled R-e-g --

2 THE WITNESS: Regalstone, yeah. Regalstone. It's one  
3 word. I'm sorry. I pronounced it as two words.

4 BY MR. JONES:

5 Q. So R-e-g-a-l-s-t-o-n-e.

6 A. That is correct.

7 Q. One word, Regalstone Limited.

8 A. Yes.

9 Q. Owner and operator?

10 A. Owner and operator.

11 Q. Okay. And your company's position is what?

12 A. We are technical managers. We are employed by  
13 Regalstone Limited. We have a contract with them to do technical  
14 management of the vessel. The ship to operate requires a valid  
15 safety management certificate. We provide the knowledge and know  
16 how for obtaining such a certificate. The ship is operated under  
17 our safety management system. That is the tie in with the owners.

18 Q. Now do you supply the crews?

19 A. We supply the crew and we do the day-to-day operation.  
20 We help the crew run the ship safely and in accordance with our  
21 system.

22 Q. And do you have one hiring facility for the crews? How  
23 do you go about getting the crews for your vessels?

24 A. We have offices all over the world. We have offices in  
25 India. We have offices in Philippines, and we have offices in

1 China, through which we primarily recruit. For the Chinese crew,  
2 we have a contract with a local manning agent. So they are  
3 responsible for putting up the crew to us. We (indiscernible) the  
4 crew records. We (indiscernible) the suitability for the ship  
5 proposed, and we hire them on that basis through the manning  
6 agent.

7 Q. And do you know offhand how many of your crews are  
8 Chinese or percentage-wise?

9 A. I do not know the exact number but I know that we are  
10 operating about 26 ships with full Chinese crew.

11 Q. When did this crew get on board the Cosco Busan?

12 A. The Cosco Busan crew got on board the ship of 24th of  
13 October 2007. The chief engineer of the ship got on board on 25th  
14 of September 2007.

15 Q. Is that a normal operation for fleet management to have  
16 the whole crew get on board at once? Does that happen often?

17 A. When we take over a new ship, this happens. Otherwise,  
18 we stagger the relief of the crew. When the owner buys a new  
19 ship, then we have to send all the crew at one time. That is what  
20 happened with the Cosco Busan.

21 Q. Okay. And do you bring anyone along to assist the crew,  
22 to oversee or --

23 A. When we take over a ship, I put all the crew, if the top  
24 management team has been with the company for a long time, then we  
25 would send the ship's superintendent along to ride the ship on the



1 first voyage. If the crew is new to our system, then we would  
2 send an onboard trainer along with the superintendent of the ship  
3 during the first voyage of the vessel.

4 Q. And was this crew new to your, your company?

5 A. Up to what I have checked except for the third officer,  
6 all other crew were new to the company and new to the system.

7 Q. So did you send that trainer?

8 A. We had Capt. Varminder Singh who was the special trainer  
9 in such situations. He had done that in the past. So he was sent  
10 on board with the ship's superintendent who was already on board  
11 the ship.

12 Q. And who determines how long Captain Singh stays aboard?

13 A. It would be the technical team which is responsible for  
14 the ship along with the -- in consultation with the owners.

15 Q. And who's the technical team?

16 A. The technical team, the company split it's number of  
17 ships into different technical teams. For this ship, the  
18 technical team is Fleet Management Limited London.

19 Q. So if I'm reading this right then, Fleet Management  
20 Limited --

21 A. London.

22 Q. -- London felt that the crew was okay to proceed since  
23 Captain Singh was disembarking the vessel?

24 A. That would be the assumption, yes. They would have  
25 consulted each other and they would have agreed that he can go

1 home.

2 Q. Okay. Now was there -- so there's no other outside  
3 trainers or supervision to the vessel once it left the dock prior  
4 to the bridge incident?

5 A. There as no on-site supervisor. The crew were going to  
6 operate that first the first time on their own.

7 Q. Okay. And that was -- so basically since the 24th of  
8 October?

9 A. I will rephrase this. Captain Singh was on board the  
10 ship along with the superintendent of the ship from 24th of  
11 October until the 7th of November, early morning 6:30, when he  
12 left for the airport. The ship was supposed to sail at 6:30 in  
13 the morning.

14 Q. Okay. And, Captain Aga, if you could just -- I probably  
15 should have got this first, but let's get it now. What's your  
16 maritime background?

17 A. My background, I started my career in 1976 at the age of  
18 17. I joined as a cadet on the Training Ship Rajindra (ph.). I  
19 completed my training in 1977, and joined as an apprentice cadet  
20 in an Indian company called Scindia Steam Navigation Company. I  
21 was an apprentice cadet until 1980. I sailed on various ships in  
22 the company. I got my second officer's license unlimited, second  
23 mate's license unlimited in 1980. Then I further sailed on their  
24 ships for a period of two years. In 1982, I got my license  
25 unlimited to be a chief mate of foreign going vessel. Then in

1 1982, I switched from an Indian company to a management company in  
2 Hong Kong. The name of the company is (indiscernible) Management  
3 Limited. I sailed as second officer until 1986 where I was  
4 promoted to be chief mate. Then I got promoted to be chief master  
5 in 1989. I sailed until October 1991 on ships of the company. I  
6 came ashore from 18 April 1992. From 1992 to 1994 September, I  
7 was in the record office of (indiscernible) Bombay. From 1994 to  
8 1996, I was heading up the operations in the (indiscernible)  
9 office as regards both record (indiscernible) Filipinos and also  
10 looking after technical operations of the ships, certain ships  
11 which used to come to Manila. In 1996 through March 1997, I was  
12 in the Hong Kong office. In October 1996 to March 1997, I was in  
13 the Hong Kong office. I was doing business -- business division.  
14 I was in the business division. Then I quit the company and  
15 joined Fleet Management in 1997. My service with Fleet Management  
16 has already been put on record. The dates I have told is pretty  
17 accurate but there may be some inaccuracies in that because I  
18 don't remember exactly all the dates correctly.

19 Q. Pretty good though.

20 DR. SAGER: How old of a company is Fleet Management?

21 THE WITNESS: Fleet Management was established in 1994.  
22 I'll just go up a little bit. I can see the slide that have the  
23 exact dates. Excuse me, Doctor, if you may.

24 DR. SAGER: Eric, please.

25 THE WITNESS: Thank you. The company was established in

1 November 1994. She was given ISM documentation, ISO 9002 in May  
2 1995. We established our first manning office in India in July  
3 1996, and established an office in Philippines in December '97.  
4 We established a training center in Bombay, India, in August 1998.  
5 We have ISO 14001 certification in October 2001. These are all in  
6 the PowerPoint presentation which I'll hand it over to you. Then  
7 OHSAS 18000 certification in 2003. Then we have various other  
8 dates.

9 BY MR. JONES:

10 Q. Okay. So you manage all different nationalities of  
11 crews?

12 A. Predominantly we have Indian crew and -- Indian, Chinese  
13 and Filipino. They are mostly the crews that we use. I will give  
14 you the presentation just in a minute. Excuse me.

15 UNIDENTIFIED SPEAKER: He came prepared.

16 THE WITNESS: No, I'm just reading off that.

17 BY MR. JONES:

18 Q. As --

19 A. I'm sorry. I've got the number here.

20 Q. Okay.

21 A. We are 71 percent Indian, 13 percent Chinese, 9 percent  
22 Filipino and the other nationalities is the remaining 7 percent.

23 Q. And of those percentages, now does the officers versus  
24 the crew make up?

25 A. Typically on a ship you will have 10 officers and 10

1 ratings. So it will pretty much be a 50/50 split.

2 Q. Are the Filipinos officers? Do they ever make up the  
3 management for the ship?

4 A. Okay. Thank you. I'm sorry. That is a mistake in the  
5 Filipinos. I'm talking about Indian.

6 Q. I know. I know.

7 A. Yes. Filipino, we don't have top management. We have  
8 up to the rank of chief mate. We have one Filipino master right  
9 now if my memory is correct. The last of it is either junior  
10 officers or ratings.

11 Q. Okay. And the Indians, do they make up crew and top  
12 ranks?

13 A. The Indians are -- will be a 50/50 split. I can give  
14 you the rank by split if you need that information.

15 Q. No, just generalities.

16 A. Yes. The Chinese also will be a 50/50 split because we  
17 have complete Chinese on these ships. We don't have any  
18 nationality mix.

19 Q. Are there some ships where you have Indian officers and  
20 Filipino crew?

21 A. We do have Indian officers and Filipino crew.

22 Q. What do you see as a manager, your biggest challenges  
23 with the crews in the safe operation of the vessels?

24 A. As a manager, our biggest challenge that we face with  
25 the crew is availability of qualified crew and the retention rate

1 because there is a (indiscernible) shortage of crew and we always  
2 face a constant danger by other agencies approaching our crew.  
3 That is one. That is one of the biggest challenges we face as of  
4 today. Then we have natural rate of attrition. People retiring.  
5 For the Indians, people in top management will typically go out of  
6 the ships more often than not at the age of 35 to 37 which means  
7 that we don't have too much time with them when we make them  
8 masters. That is another challenge.

9 Q. And how old are you just for the record?

10 A. For the record, I'm 48.

11 Q. And how long have you been ashore?

12 A. I've been 16 years.

13 Q. So about when you were 35 to 37?

14 A. I came ashore when I was 32.

15 Q. Okay. So that was a good argument you just put forth?

16 A. Yes, sir. Thank you. So talking of challenges in  
17 keeping this crew, well trained and well motivated. We see that  
18 the regulations world over is increasing at an alarming rate and  
19 we have to keep abreast of the regulations and we have to keep our  
20 crews trained. So we use various methods for such training. The  
21 latest one we have introduced is a system called Training on Land  
22 and Sea for which we have been awarded the best (indiscernible)  
23 award recently. So what it does basically is that we have created  
24 training programs, modules, which are available to the crew on the  
25 ship, and then they can take training at anytime they want and

1 there is a test paper which comes out after they finish the  
2 training. So and this is all documented and it is on ISO. So we  
3 do that for training. Then we also have our own institute where  
4 we train the crews, and we do cross-nationality training  
5 especially for ships with Filipinos and Indians, when we are  
6 mixing. Our company has a policy not to have more than four  
7 nationalities on any ship. We --

8 Q. Can I just interrupt you there? How does -- how do the  
9 crews take to the cross-nationality training?

10 A. Well, they -- the usual argument is that everybody  
11 thinks they're doing a very good job. So typically it is more for  
12 the officers in handling the Filipino ratings. If they do not  
13 speak to them nicely, then they do not get to know the real  
14 problems on the ship. There is -- there's a tendency on the  
15 Filipino, if you, if you don't give him respect, if he thinks you  
16 don't give him respect, he will not be open with you. So this is  
17 something that we focus on. Then we also talk to the Filipinos to  
18 tell them that just because somebody speaks to you in a loud voice  
19 does not mean that he's insulting you. It's probably the way he  
20 talks to his people, and then when he meets you, he does not know  
21 that any raising of tones indicates that you're being aggressive.  
22 So such items are discussed. Eric, do you have a question for me?

23 DR. SAGER: No.

24 THE WITNESS: Sorry.

25 BY MR. JONES:

1           Q.    So these are, these are areas, somehow you've identified  
2   in trying to deal with and train to mitigate them?

3           A.    Yes, sir.  That is correct.  We identified this.  We  
4   also identified something called power grading.  That is something  
5   that you have probably heard about.  So we try to -- this is a  
6   problem or this is an identified weakness that can happen with  
7   nationalities when they train internationally.  That means that  
8   they will be overpowered by someone coming on board the ship who  
9   is more aggressive than them.  This is also a problem which we  
10  like to address.

11          Q.    Now this power grading, is this something that you've  
12  identified just in your own crews that you've hired at Fleet  
13  Management or are these studies you've referenced that are outside  
14  your own Management like university studies or worldwide studies?

15          A.    We have not used any other outside agency or we have not  
16  used any other studies, but we realize that we do have an issue  
17  sometimes with the crews who cannot speak up.  So we always talk  
18  to the crew about this.

19          Q.    And what type of training do you give them to, to combat  
20  or mitigate this type of -- this power grading?

21          A.    We hold seminars and we do play acting.  Voice A, okay,  
22  I'm the pilot or I am the inspector coming on board and you are  
23  the ship master, and we say, how are we going to deal with this.  
24  So first we have a very polite person comes and shakes hands and  
25  talks to them nicely, and the other guy comes and it's, "Hey,



1 Captain." So then we see how he's going to react to that and does  
2 he find it difficult to speak to the person when this happens. So  
3 we say any type of person coming on board, it's your ship, it's  
4 your responsibility. This is something that we talk about in our  
5 training, and this is done through seminars

6 Q. Did the --

7 DR. SAGER: Let me just ask him a question.

8 MR. JONES: Sure.

9 BY DR. SAGER:

10 Q. Do you have scoring on how people do on this?

11 A. I'm sorry. We do not have any records of this.

12 Q. Well -- but how do you evaluate them? Do you -- or --

13 A. We have -- we do not have as yet any scientific method  
14 of documenting this. So we are working on it. We do not have  
15 anything at this moment. That will be incorrect to say that.

16 BY MR. JONES:

17 Q. How about the captain of the Cosco Busan? Did he ever  
18 participate in this type of training?

19 A. He has -- I do not know this. I don't know the answer  
20 to this question since he's new to the company. He has not done  
21 any seminars with us.

22 Q. How recently would you say you identified this type of  
23 power gradient and how recently or how long have you been  
24 implementing these types of seminars and play acting?

25 A. Last two years.

1           Q.    And where did -- how did you first realize there was a  
2    problem?

3           A.    We have some ships which go to New Zealand and  
4    Australia, and we have had an issue with the crew being  
5    pressurized into doing something which would have resulted in an  
6    unsafe operation.  So we identified that.  We have discussed the  
7    matter with them.  We've had no problems after that so far.

8           Q.    Well, this was localized to certain ships in a certain  
9    area.  Do you think this is worldwide or do you think this is -- I  
10   mean what -- well, what's making you training your crews of 190  
11   ships, you know, if you think you've solved the problem in where?  
12   New Zealand or Australia.  What makes you think you need to  
13   continue?

14          A.    Training is a constant exercise, and we do not think we  
15   can solve the problem just by holding a few seminars.  We keep  
16   continuously talking about this.  So this can happen to anybody in  
17   any part of the world.  So that is something that we cannot  
18   address in just few seminars but we keep talking about it, so that  
19   we hope that more and more people will be forthcoming and can talk  
20   openly without fear.

21          Q.    Is this a part of your safety management system?  Is  
22   there anything that identifies it?

23          A.    It has not been documented in our safety management  
24   system.  It has only been done in the seminars.

25          Q.    Are you looking to document this in the future --

1 A. Yes, we are.

2 Q. -- within Fleet's program?

3 A. We have, we have programmed to document this and include  
4 scientific studies about this in our safety management system.

5 Q. Do you have anything -- you said you would be willing to  
6 let us see the PowerPoint for the management. Do you have any of  
7 the -- do you have any type of electronic media like your training  
8 that you give to the crews that also would incorporate this type  
9 of training?

10 A. I think -- I do not know because I have to check. If it  
11 is there, I will be willing to share it with NTSB, but I do not  
12 think at this moment, to the best of my memory, I do not know.

13 Q. So this seems like a very new --

14 A. New concept.

15 Q. -- new concept that you're trying to work with,  
16 mitigate, develop.

17 A. That is correct. We identified this somewhere in 2005,  
18 2006. So we have done seminars. So we will -- that's why we are  
19 talking about putting it in the SMS.

20 Q. Okay. And do you find this problem also within your  
21 ships, intra-ship, or is it just when you go into foreign ports  
22 dealing with the -- whether it's local authorities or pilots or is  
23 it both? Is it intra-ship and also when you're arriving at port?

24 A. Yeah, we find this problem sometimes in intra-ship also  
25 because you can have a very strong master who is very strict and

1 that does not go over well for the junior, juniors to come up to  
2 him and express their views. We have identified that also, yes,  
3 it does exist on board the ships and it does exists with  
4 outsiders.

5 BY DR. SAGER:

6 Q. Who are you using to develop this training technically?

7 A. I do not have the answer to that, Eric.

8 Q. Are you doing it with in-house people or are you doing  
9 it with contractors?

10 A. At the moment, so far, we have done is -- we have done  
11 everything in house. So we think when we document it in the SMS,  
12 we will require to have scientific studies to address this. We  
13 also in our seminars, typically we carry -- we call a  
14 psychoanalyst and we have used the services of such a person, and  
15 they talk about team building and team exercise, and they talk  
16 about the birds formation, where there is an aerodynamic wing, you  
17 know, all the birds fly in a formation and who is the team leader  
18 and when he becomes tired, what happens? He goes back and how the  
19 team splits up and forms that pattern again so that the team gets  
20 such -- the team gets the best effort that is possible from the  
21 team. So we have discussed this in the seminar. There is an  
22 outside person coming who is a trained psychologist who comes and  
23 talks about it to the crews who is attending the seminar. We have  
24 done that. So we have documented that training, I'm sure but  
25 scoring, I don't have.

1 BY MR. JONES:

2 Q. Do your crews take bridge resource management training?

3 A. Yes, sir, they are. They take bridge resource  
4 management training.

5 Q. Because one of the key factors in bridge resource  
6 management training is the ability to question wrong orders or at  
7 least speak up to talk about obvious things that might be going  
8 wrong. So I mean that, you know, to combat what you say is the  
9 power gradient, incorporates the principles of bridge resource  
10 management. So --

11 A. I agree. I agree.

12 MR. JONES: Anything?

13 MR. LARUE: Just a couple of things.

14 BY MR. LARUE:

15 Q. Let's see. Your company, you said you guys provide the  
16 knowledge and know how to have -- to do effective safety  
17 management for the ships. Who actually is responsible for  
18 carrying out the training --

19 A. The quality --

20 Q. -- on shipboard?

21 A. Sorry. The quality and safety department of our company  
22 is responsible for implementing our system. We have a designated  
23 person ashore and we have the head of quality and safety, and on  
24 board the ship, the master is responsible for implementing the  
25 system and training. That's the answer to your question.

1           Q.    Yes.  Is that training given by the quality and safety  
2 department?  Or are they giving -- I guess -- I want to know  
3 whether the ship itself is giving the training?  I want to know I  
4 guess the qualifications of the folks at your company for dealing  
5 with the SMS.

6           A.    No, I can't get the direction of the question.  What --  
7 we have a safety management system.  We have the safety management  
8 system.

9           Q.    Uh-huh.

10          A.    We are using that system on the ships.

11          Q.    Right.

12          A.    So we implement that on board the ship and when they  
13 have procedures, the implementation is done by -- they can do by  
14 checklist --

15          Q.    Uh-huh.

16          A.    -- and by audits, internal audits and external audits.  
17 So the system incorporates, like let's say I have a procedure for  
18 master pilot exchange.  I have a bridge checklist which will take  
19 care of that part.  If he follows that bridge checklist, pretty  
20 much he covers the procedures that are there in the safety  
21 management system.

22          Q.    Right.

23          A.    So this system is implemented using checklists and  
24 internally auditing the system and also having an external agency  
25 audit the system.  So that's how we implement it.  And the

1 responsibility for implementation is with the quality department.

2 Q. Okay. I guess, I guess what I was trying to ask, is  
3 there any additional training or things that folks at your company  
4 are required to do?

5 A. Yes. Okay. The people do internal audit of scores.

6 Q. Uh-huh.

7 A. People are training in internal audits. People do --  
8 some of them are qualified external auditors on the  
9 (indiscernible) system. Then we have, I myself also, we do  
10 refresher training in the standards. There are a whole lot of  
11 courses that they do. I do not remember complete list of courses  
12 that they do. They are trained constantly.

13 Q. Okay. And when you get a new ship such as the Cosco  
14 Busan, how long does it -- when you're implementing a new safety  
15 management system with a new crew, how long does that normally  
16 take to --

17 A. Okay. The --

18 Q. -- until they're comfortable?

19 A. When we take over a ship, the -- with the trainer, we  
20 put the trainer on board. Initially the ship undergoes an interim  
21 SMC audit by the responsible organization.

22 Q. Uh-huh.

23 A. In this case, (indiscernible). So what he checks is  
24 does the master understand the basics of the safety management  
25 system? Does he know where his authority comes from --

1 Q. Uh-huh.

2 A. -- as far as safety is concerned? Then he will check  
3 that the crew knows basic safety procedures, they know where the  
4 location of the various fire fighting and lifesaving appliances  
5 are, and he will probably do a drill, a board drill and a fire  
6 drill, and then issue an interim safety management certificate  
7 which is valid for three months. Then there's a work in progress.  
8 We continue to train and then maybe after 45 days, we will do an  
9 internal audit to check that the system has been implemented  
10 correctly, and then we'll call in for an external auditor to come  
11 and do a full audit. So by the end of three months, we have a  
12 certificate and we are confident that the whole system is in  
13 place. In this case, Captain Singh was doing the indoctrination  
14 of the crew.

15 Q. Uh-huh.

16 A. So that period can be anything between two weeks to four  
17 weeks.

18 Q. Okay. And the interim certificate is issued and then  
19 all the steps you just indicated?

20 A. The interim certificate for the ship was issued on 25th  
21 of October. That is one day after the crew came on board. So  
22 that is a basic check that they do.

23 Q. Uh-huh.

24 A. But they know that there is a system, they know where  
25 the authority is coming from, and they check all the crew



1 qualification as per STCW and what other items I pointed out --

2 Q. Right.

3 A. -- like basic knowledge of a ship and the safety  
4 equipment.

5 Q. Were there any issues with implementing this on board  
6 the Cosco Busan?

7 A. There were no issues reported.

8 DR. SAGER: And their indoctrination period was how  
9 long?

10 THE WITNESS: From 24th of October to the 7th of  
11 November, until the time Captain Singh and the superintendent were  
12 on board.

13 MR. JONES: Did he file a report about that quality  
14 documentation, his trip on board? Does he just call and say  
15 they're ready or does he fill out some type of form to submit to  
16 the office that says these guys have been -- not only do they do  
17 their own check off list, but I have checked them off?

18 THE WITNESS: I'll have to check that. I don't remember  
19 but he came back immediately after the accident. Even if he had  
20 to sign off, I do not know. I do not know whether he has filed  
21 such a report. But it will be --

22 BY MR. LARUE:

23 Q. He's required to?

24 A. Yeah, he's required to make a report of his training.

25 Q. Okay. That would be something that we would be I guess

1 interested in seeing.

2 A. Okay.

3 MR. JONES: The document.

4 DR. SAGER: That's right.

5 THE WITNESS: Yes.

6 BY MR. LARUE:

7 Q. Let's see. I have one more question about the power  
8 gradient seminars that you do. I don't think you mentioned, it is  
9 like a one day seminar or is it a week long thing? What's the  
10 length and then how often do you do, like do you do them every  
11 month or --

12 A. No, typically we do two seminars and -- two to three  
13 seminars. That's what I said before and it lasts about two days,  
14 three days.

15 DR. SAGER: Each seminar?

16 THE WITNESS: Each seminar. And it's not that it's 100  
17 percent about power gradient only. It will be a session.

18 MR. LARUE: Okay. I've got you.

19 BY MR. JONES:

20 Q. Do you feel they get it after these sessions? Do they  
21 understand what the sessions are about and I mean is it a one time  
22 fix or is it a process that you have to continually refresh with  
23 the crews?

24 A. We have to -- it's a constant process and we have to  
25 keep doing this as often as possible.

1           Q.    Do you find it easier -- I know you've only been doing  
2   it for a short time, but is it easier to bring younger crew  
3   members, officers or crew up to a level where they can deal with  
4   this, and is it harder with older crew members?

5           A.    I do not have any scientific data, but I can tell you  
6   from my experience but the older the person gets, the more  
7   difficult it is to change his type of thinking.

8                   BY MR. LARUE:

9           Q.    What's the working language on the Cosco Busan?

10          A.    On the Cosco Busan, the working language is -- for  
11   outside is English. Between the crew, they speak Chinese because  
12   they're all from the same place.

13                   DR. SAGER:   What Chinese?   What kind of Chinese?

14                   THE WITNESS:   They speak Mandarin Chinese.

15                   MR. LARUE:   I don't think I have any more questions  
16   right now.   Thank you.

17                   MR. JONES:   Dr. Sager.

18                   DR. SAGER:   I just forgot one.   Yeah.

19                   BY DR. SAGER:

20          Q.    You have an institute for training.

21          A.    That is correct, sir.

22          Q.    I mean this is a physical --

23          A.    It is a physical institute in Bombay. We have invested  
24   I think about \$1.5 million, if I'm not too far off.

25          Q.    And how large is the staff?

1 A. I do not know the numbers. I'm sorry.

2 Q. Ballpark?

3 A. Ballpark --

4 Q. A hundred, fifty.

5 A. Probably not that big.

6 Q. Twenty-five?

7 A. Yeah, it could be about 15 I think.

8 Q. Fifteen.

9 A. Because there -- yes. Because there are simulators and  
10 I don't remember the number. Okay. There is a master, the two  
11 chief engineers. Then there's one more (indiscernible) and then a  
12 few staff. I can't give you a number. Maybe even as low as 10.  
13 I'm not sure. But the equipment is there and the crew training is  
14 going on there. It's a big institute.

15 Q. Does that run 365 a year?

16 A. It runs 365 days a year.

17 Q. And who attends that institute?

18 A. We do refresher training. We do simulator training.  
19 All our crews attend there. We also occasionally open it to  
20 outside crews. This is in India. We do not have training  
21 facility of our own at the moment in the Philippines or China.

22 Q. So this is exclusively then for your Indian crews?

23 A. That is correct. There are times when we get people of  
24 nationality like Ukrainians. Then we send them to Bombay to train  
25 on the system. They are a very small number. So they do not

1 know. But for the Chinese themselves, they are very good training  
2 facilities in the area, (indiscernible) is not of China. Dalian  
3 Maritime University has excellent training facilities.

4 Q. What Maritime?

5 A. Dalian Maritime.

6 Q. I think you answered the other questions I have here.  
7 This crew, the only training that Fleet Management has provided  
8 this crew was the indoctrination period?

9 A. That is correct. Except the chief engineer. He was on  
10 board the ship before the takeover for one month.

11 Q. Okay.

12 A. So he was also training himself on the equipment and  
13 everything.

14 Q. Was the plant lid off when he was on it or was it down?

15 A. I beg your pardon, sir.

16 Q. Was the plant down when he was on it? He was just the  
17 coal plant? He was just walking through?

18 A. No, he -- the ship was in operation. The previous  
19 owners were running the ship and these guys, both Captain Singh  
20 and the chief engineer. They were on board the ship. They were  
21 watching how the ship was being operated.

22 Q. Okay.

23 A. So they were looking at the machinery as it is running  
24 and the various equipment on the bridge also was noticed and  
25 observed by Captain Singh. That's what they did.

1 Q. Okay.

2 BY MR. LARUE:

3 Q. You guys have a lot of ships that you're in charge of --

4 A. That is correct.

5 Q. -- implementing the safety management for it looks like  
6 quick amount of -- you said 167?

7 MR. JONES: 190.

8 THE WITNESS: 190 ships as of today.

9 BY MR. LARUE:

10 Q. I wrote the numbers down wrong, but what are some of the  
11 kind of common problems that you run into with these ships as far  
12 as implementing these plans?

13 A. I do not remember. I can -- I don't have the data.  
14 What is your -- I mean what are you -- what kind of problems are  
15 you looking for?

16 Q. I mean do you ever have ships that just -- that don't  
17 want to do what the plan, you know, what they're supposed to do  
18 according to the plan, that you just don't implement it? I  
19 mean --

20 A. No, I cannot answer that question correctly.

21 Q. Okay.

22 A. I would like to take a pass. I'm sorry.

23 BY MR. JONES:

24 Q. Well, if they're documented, they're all under SMS --

25 A. Yeah.

1 Q. -- you're going to be receiving safety concerns.

2 A. We have safety management system. We have an incident  
3 reporting form and we have the (indiscernible) reporting form. We  
4 have internal audit and we have superintendent visits. So all  
5 these -- the facts or whatever is found is put on the website and  
6 there's a closure. There's a closure period given and it gets  
7 closed out as the things fixed. So we have not done any training  
8 of the types of problems.

9 Q. Okay.

10 A. That's why I cannot answer that specific question. What  
11 areas is it? That's what I thought you focused on.

12 MR. JONES: Does anybody have anything else right now?

13 (No response.)

14 MR. JONES: Go ahead. Come up with something, Eric, but  
15 what I'll do is --

16 DR. SAGER: I'm interested in the modules.

17 MR. JONES: Okay.

18 BY DR. SAGER:

19 Q. The modules that were ship borne, there are CDs?

20 A. Sorry.

21 MR. JONES: The training modules.

22 BY DR. SAGER:

23 Q. The training modules on board the ship, what form are  
24 those in?

25 A. Well, they are web-based. They can be PowerPoints.

1 They can be something to read about and I can show you one after  
2 we finish --

3 Q. All right.

4 A. -- on the web.

5 Q. So they're web-based. And how many of those do you  
6 have? Do you know offhand?

7 A. I don't know. Maybe 50, 60, I don't know.

8 Q. Okay.

9 BY MR. JONES:

10 Q. Possibly for each rating.

11 A. Yes.

12 Q. And their jobs, it's their duties on board, the  
13 equipment they'll be running on board.

14 A. Possibly but I'll have to check it.

15 Q. Okay. If it's one CD, like the SMS, could you provide  
16 that to us?

17 A. I don't think it's on a CD.

18 Q. A bunch of CDs?

19 A. I'll show you some.

20 Q. Okay.

21 BY DR. SAGER:

22 Q. Even a list of modules would help.

23 A. A list of courses that we conduct?

24 Q. Yes.

25 A. A list containing modules that we have on board?



1 Q. Yes.

2 A. Okay. We can do that. Call us. We'll give you.

3 Q. Are the modules developed in house?

4 A. Everything's developed in house.

5 BY MR. JONES:

6 Q. What was the name of that training institute in Bombay?

7 A. It's called Fleet Management Training Institute.

8 Q. I thought I was going to have to interpret it.

9 A. FMTI.

10 Q. Isn't in Mumbai?

11 A. It's in Mumbai.

12 Q. Okay.

13 DR. SAGER: Do they have a website?

14 THE WITNESS: We have a website but they do not have a  
15 website, PowerPoint website.

16 BY MR. JONES:

17 Q. One thing, just in case someone else comes up with a  
18 question or two, we'll entertain it, but one of the things we do  
19 at an interview, is ask you as the company rep, what do you think  
20 Could have been done? I know it's a hypothetical but, you know,  
21 no one wants to go through something like this, as I'm sure you  
22 know, but what do you see as a possibility that could have  
23 prevented this?

24 A. I cannot answer that question as of now.

25 Q. Okay.

1 BY DR. SAGER:

2 Q. Can I hedge on that? In your sense of what happened,  
3 would training have -- on board, would training have had any  
4 mitigating effect on the accident?

5 A. I do not believe so at this moment.

6 Q. Okay.

7 MR. JONES: Okay. Anything else?

8 MR. LARUE: I have nothing.

9 MR. JONES: Okay. We'll conclude the interview.

10 CAPTAIN AGA: Thank you, sir. Thank you for your  
11 assistance.

12 DR. SAGER: Thank you.

13 (Whereupon, the interview in the above-entitled matter  
14 was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:           The Investigation of the Cosco  
                                  Busan/Bridge Allision  
                                  San Francisco, California  
                                  Interview of Captain Nagarajan Aga

DOCKET NUMBER:           DCA-08-MM-004

PLACE:                    Washington, D.C.

DATE:                     November 18, 2007

was held according to the record, and that this is the original,  
complete, true and accurate transcript which has been compared to  
the recording accomplished at the hearing.

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Kathryn A. Mirfin  
Transcriber